

FIG. 1
PRIOR ART

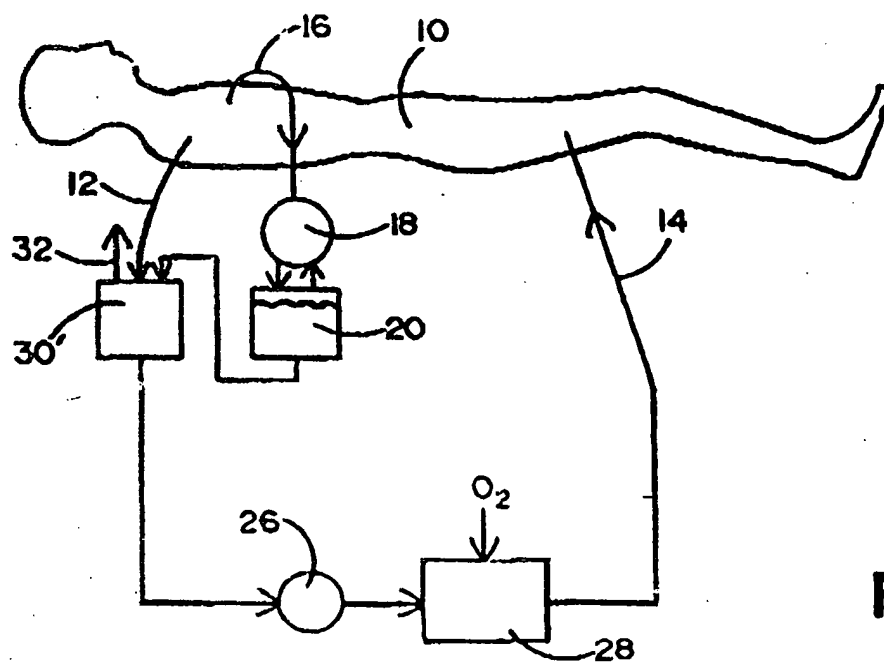


FIG. 2
PRIOR ART

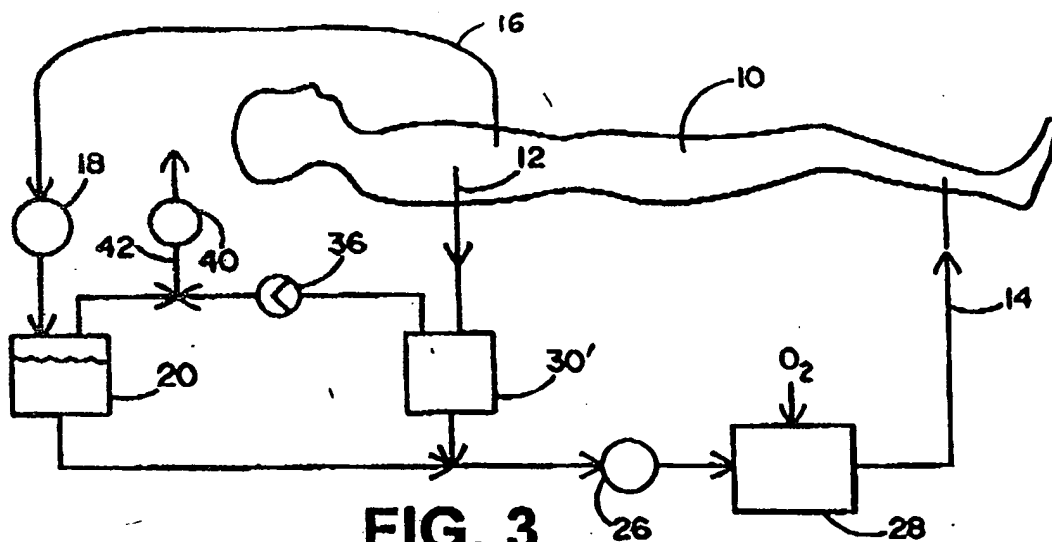


FIG. 3
PRIOR ART

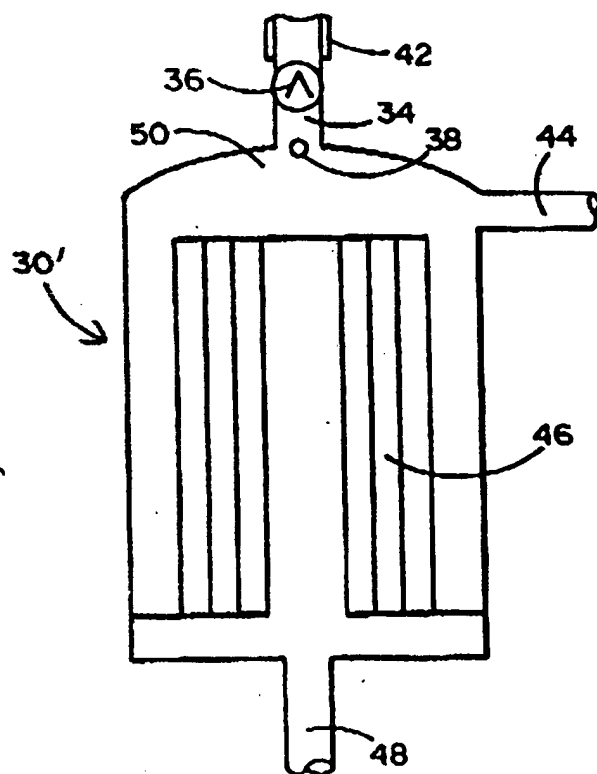


FIG. 4
PRIOR ART

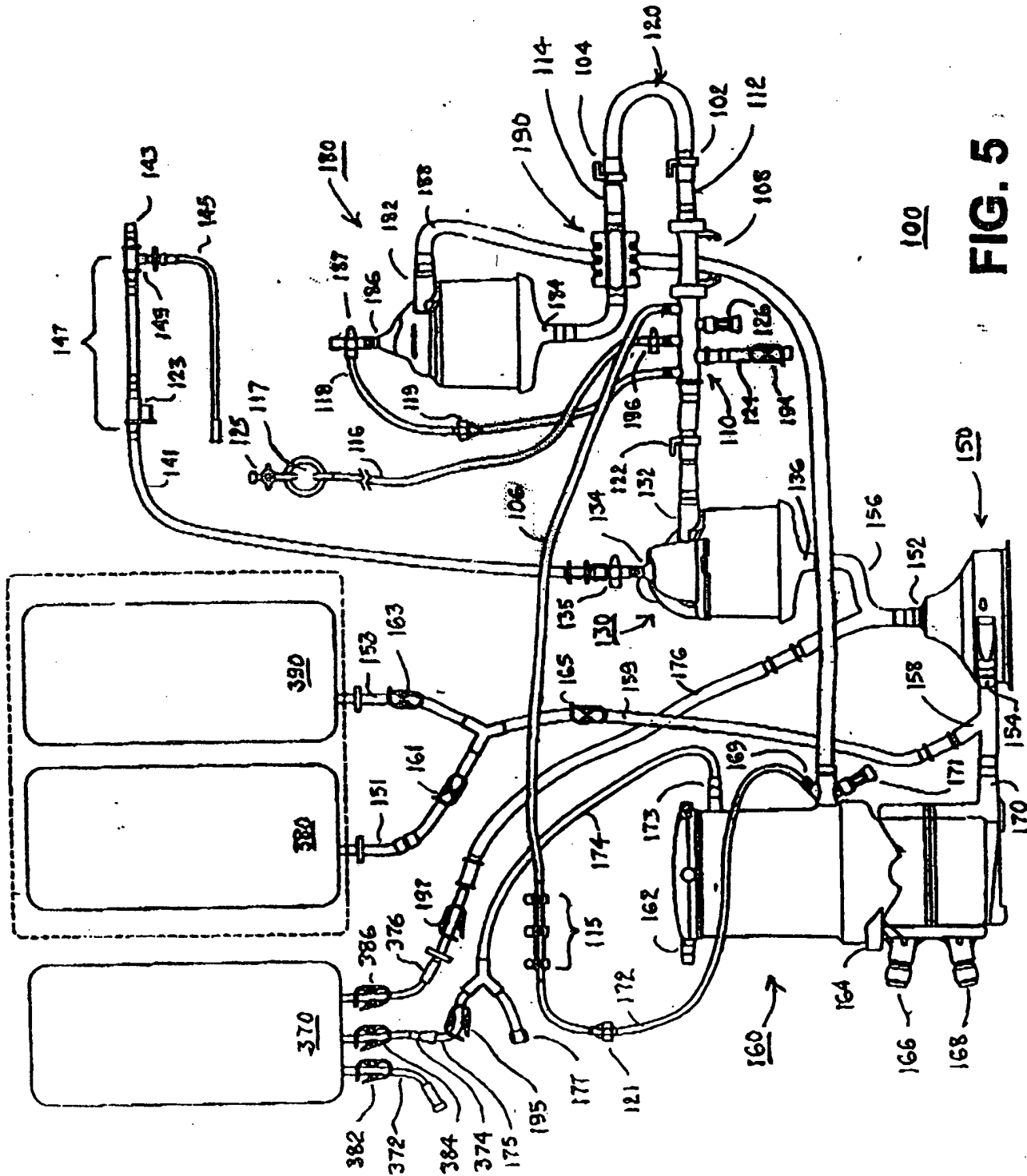


FIG. 5

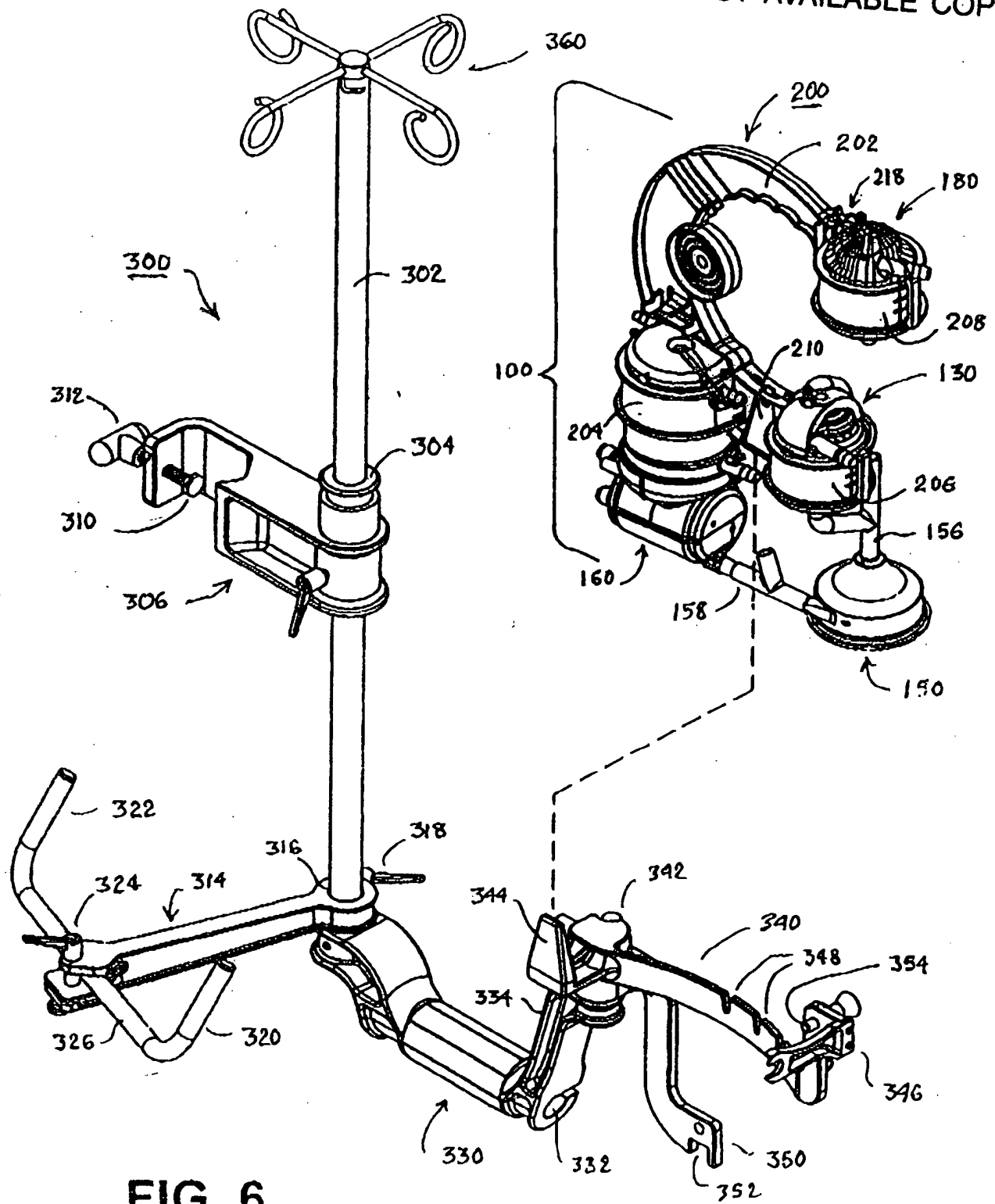


FIG. 6

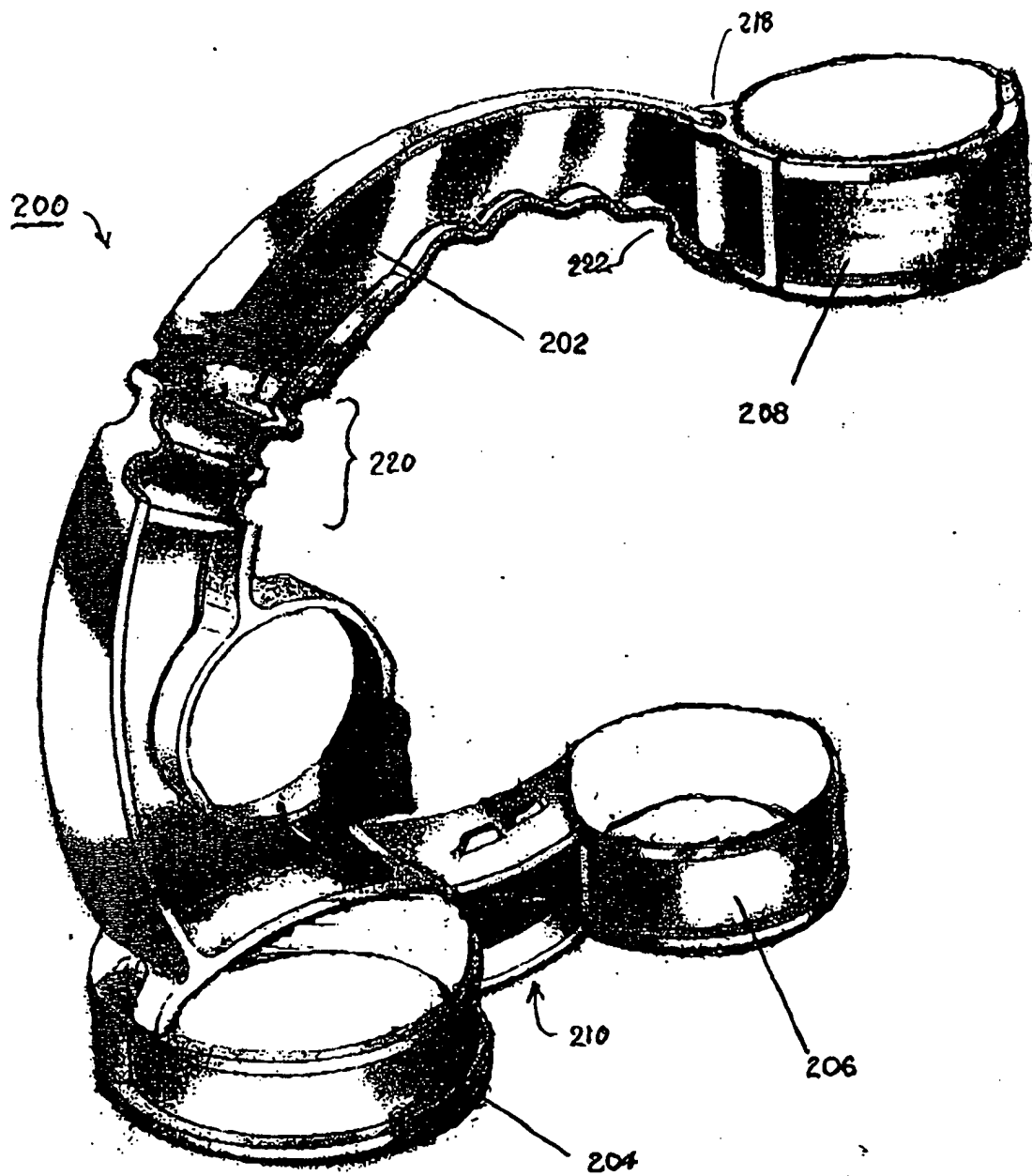


FIG. 7

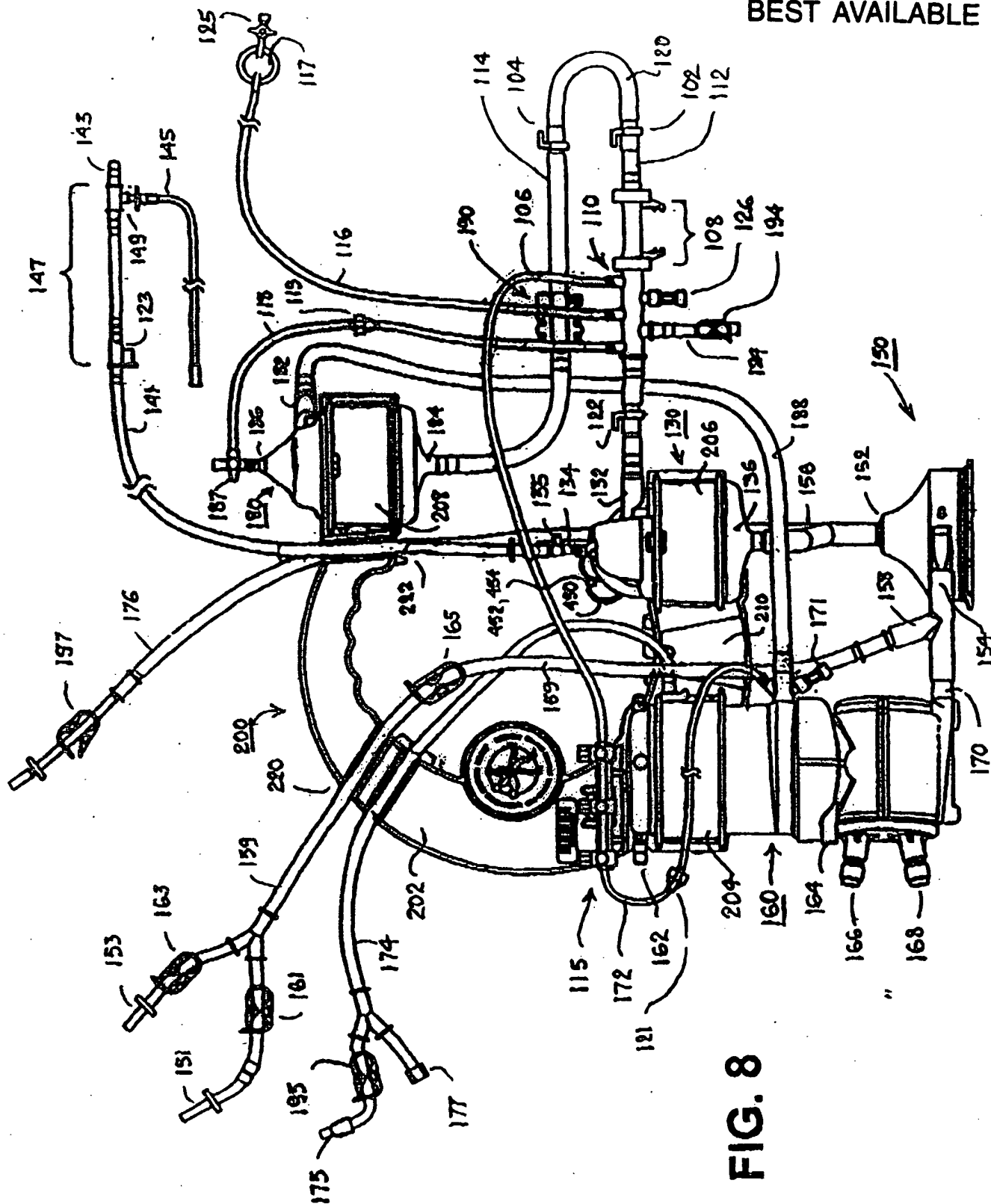


FIG. 8

FIG. 9

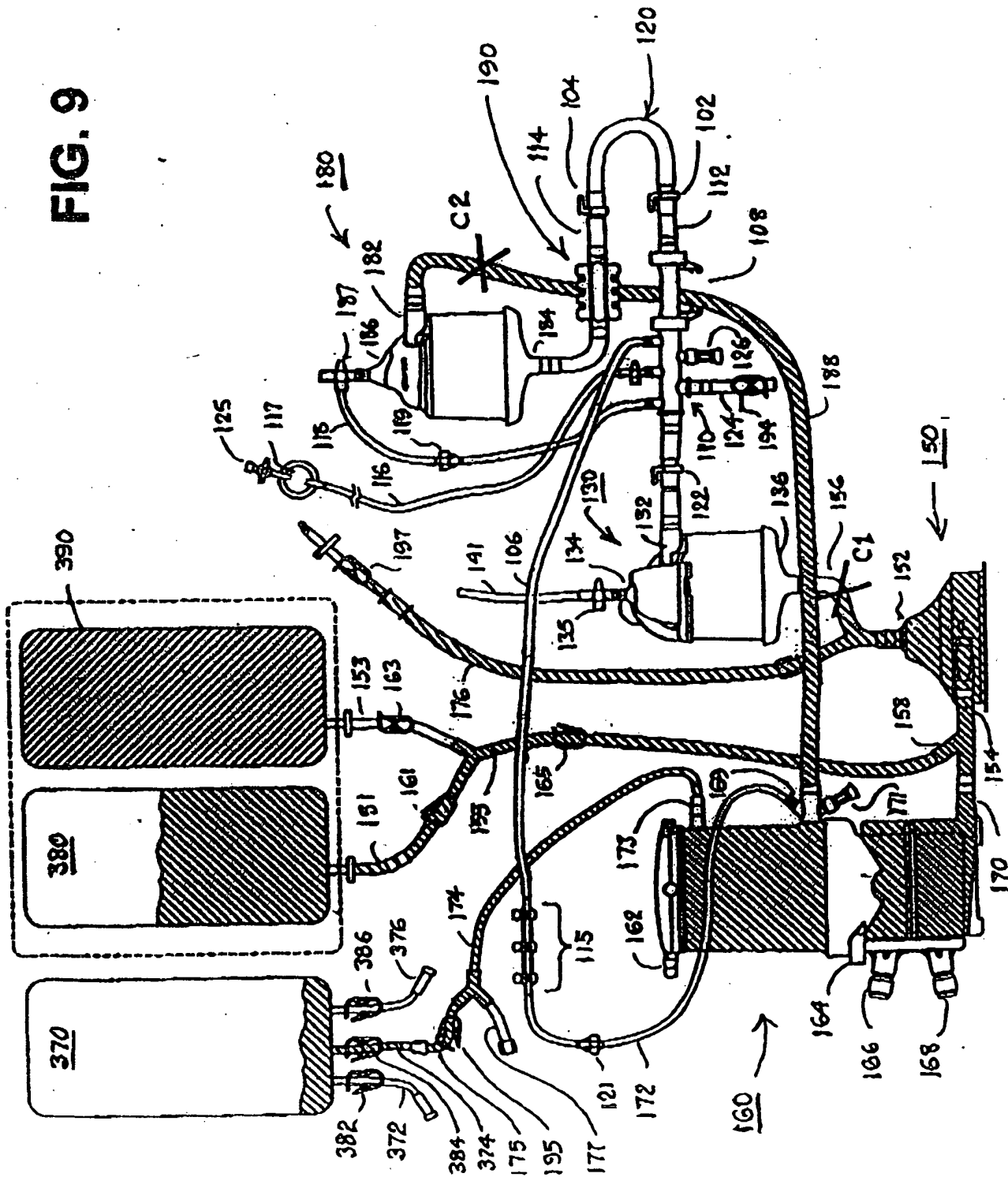


FIG. 10

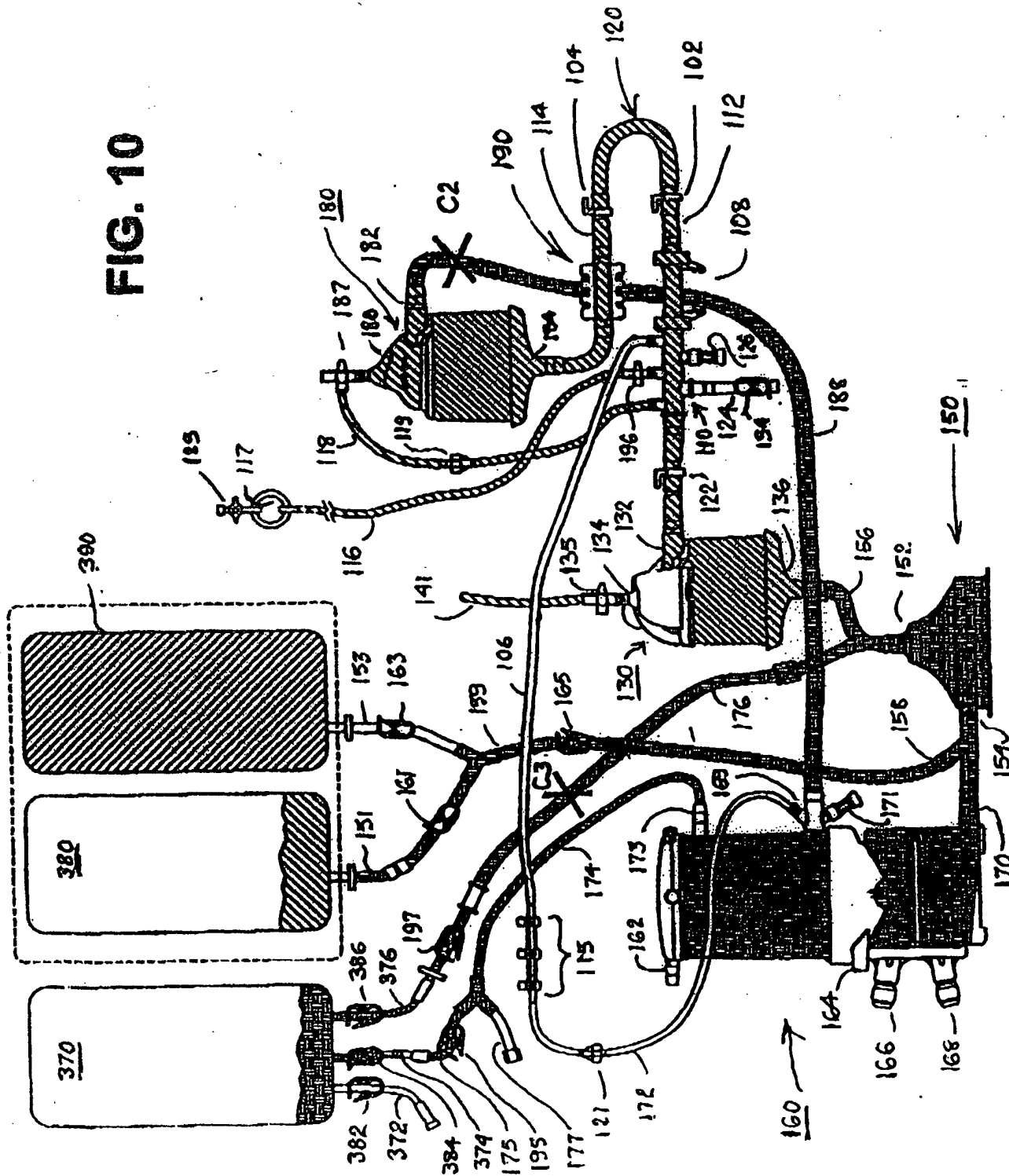
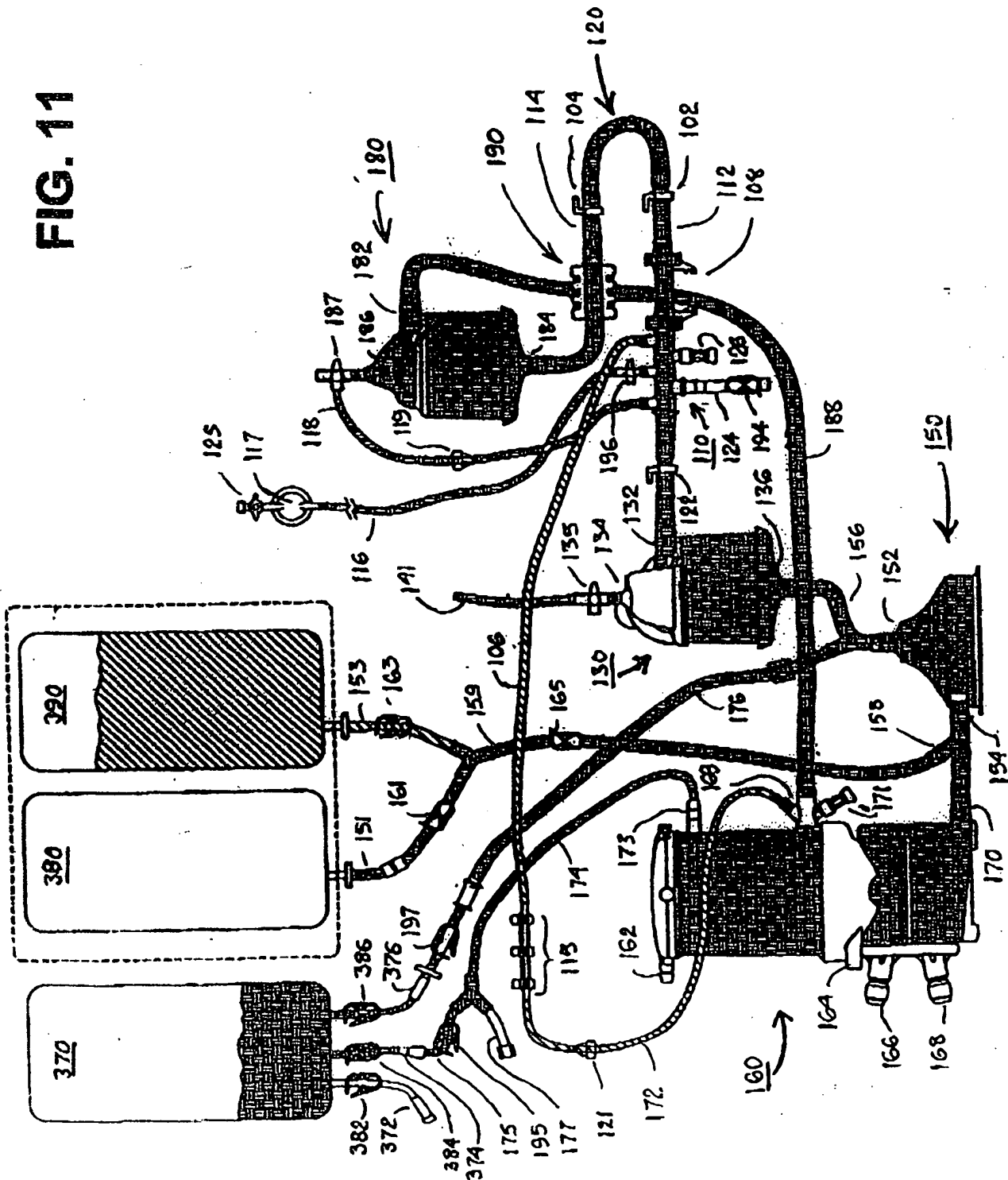


FIG. 11



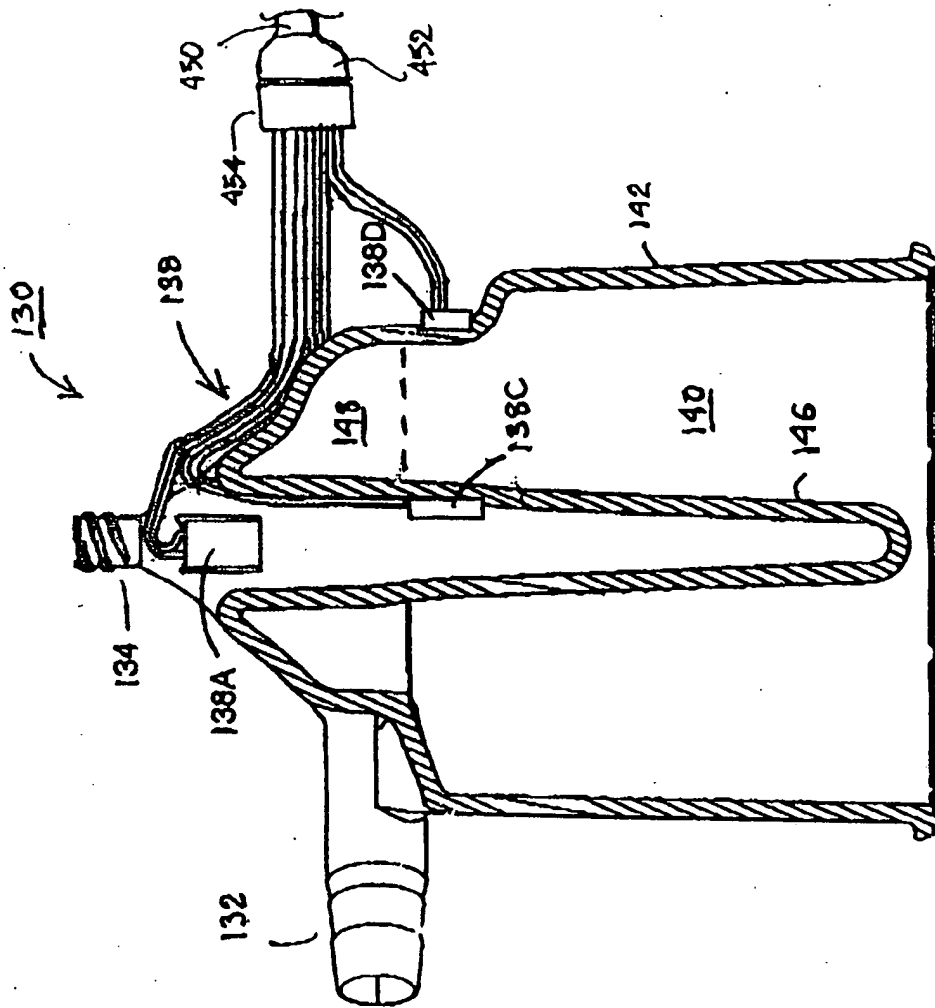


FIG. 12B

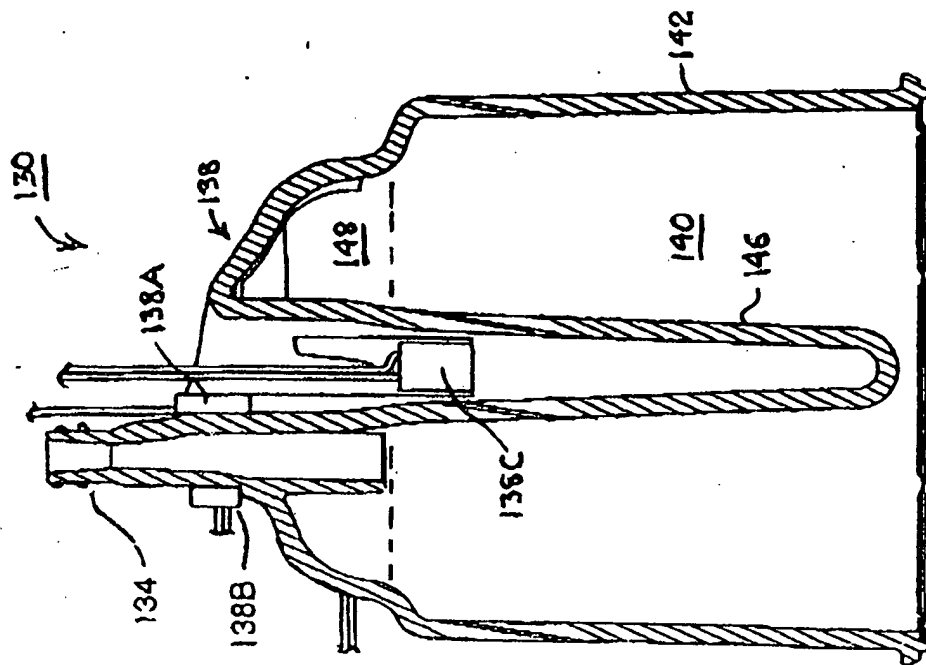


FIG. 12A

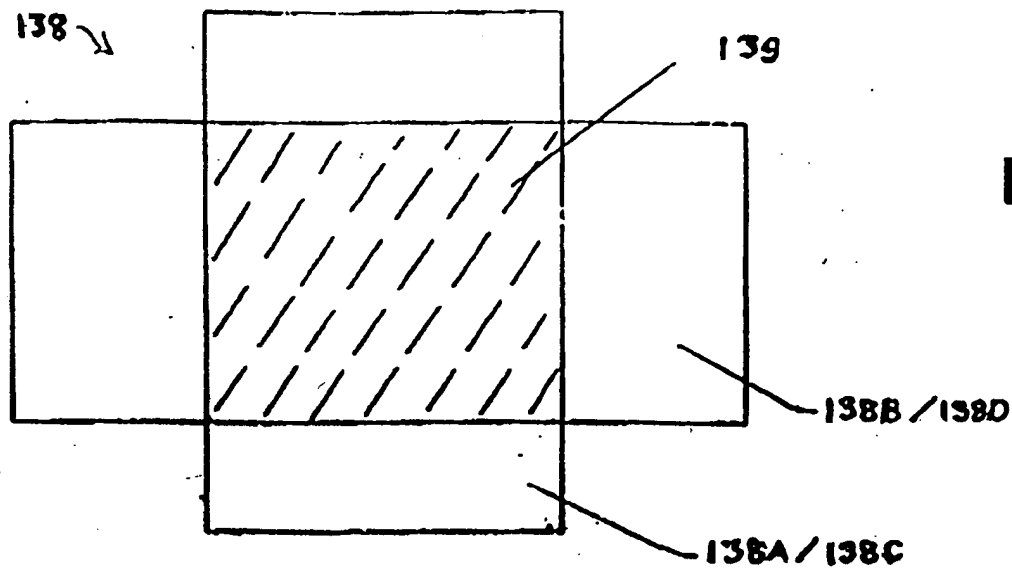
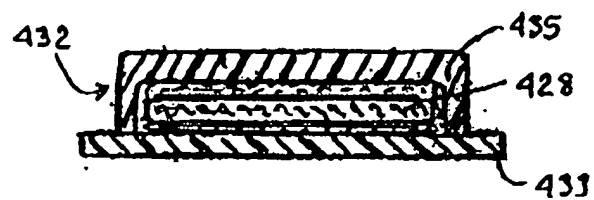
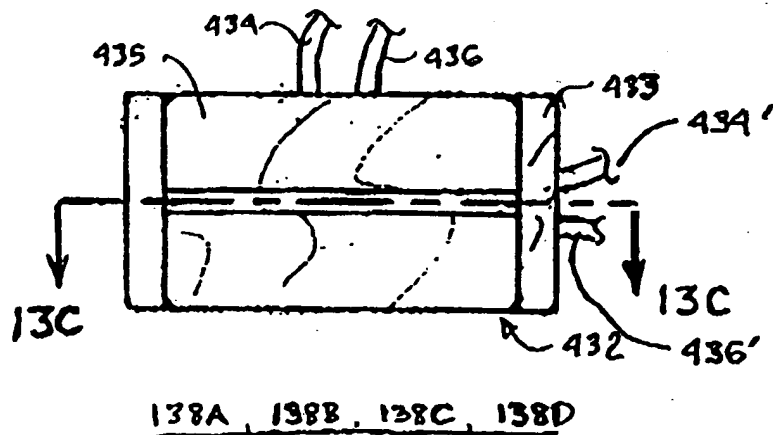


FIG. 13A

FIG. 13B



138A, 138B, 138C, 138D

FIG. 13C

FIG. 13D

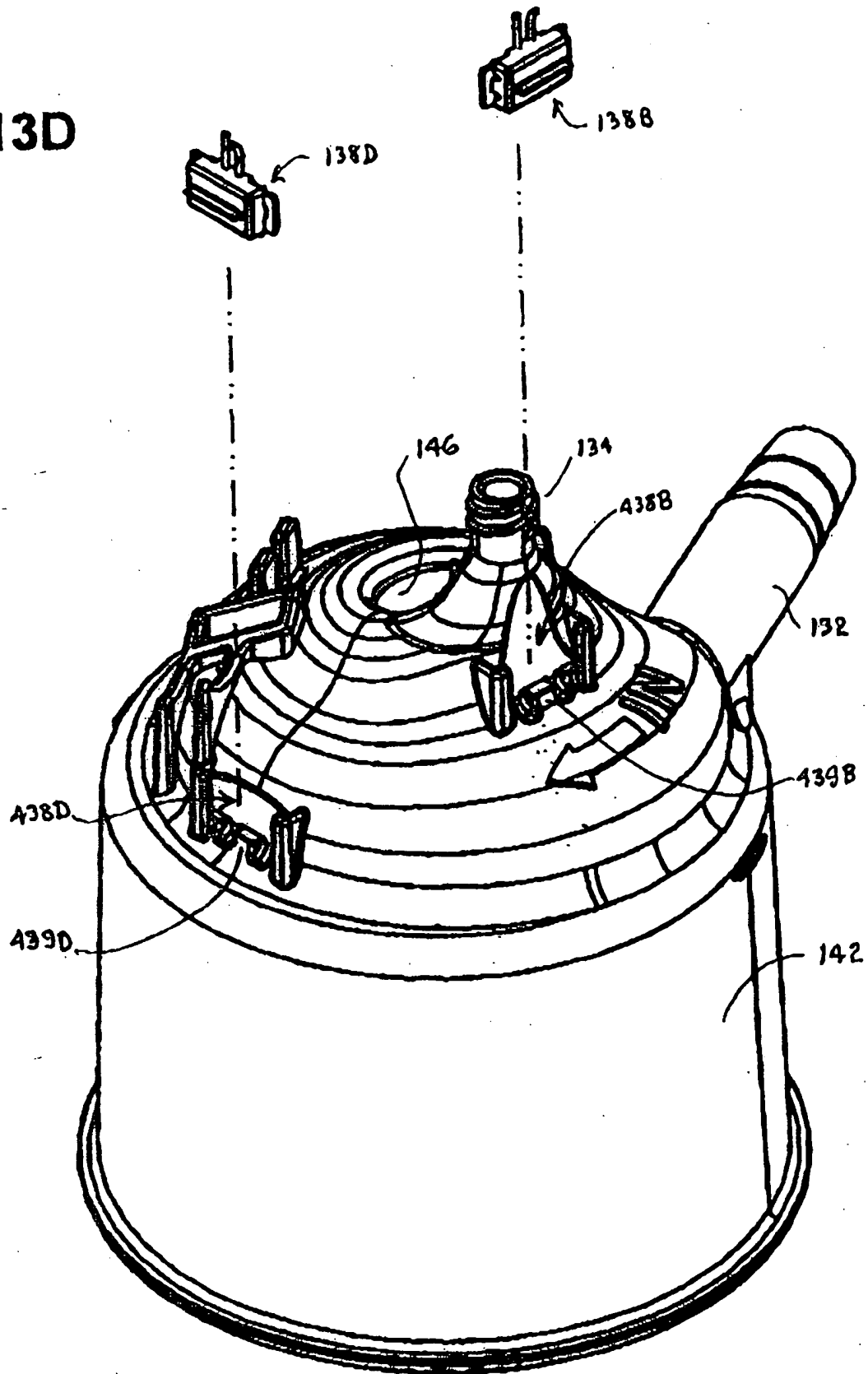


FIG. 13E

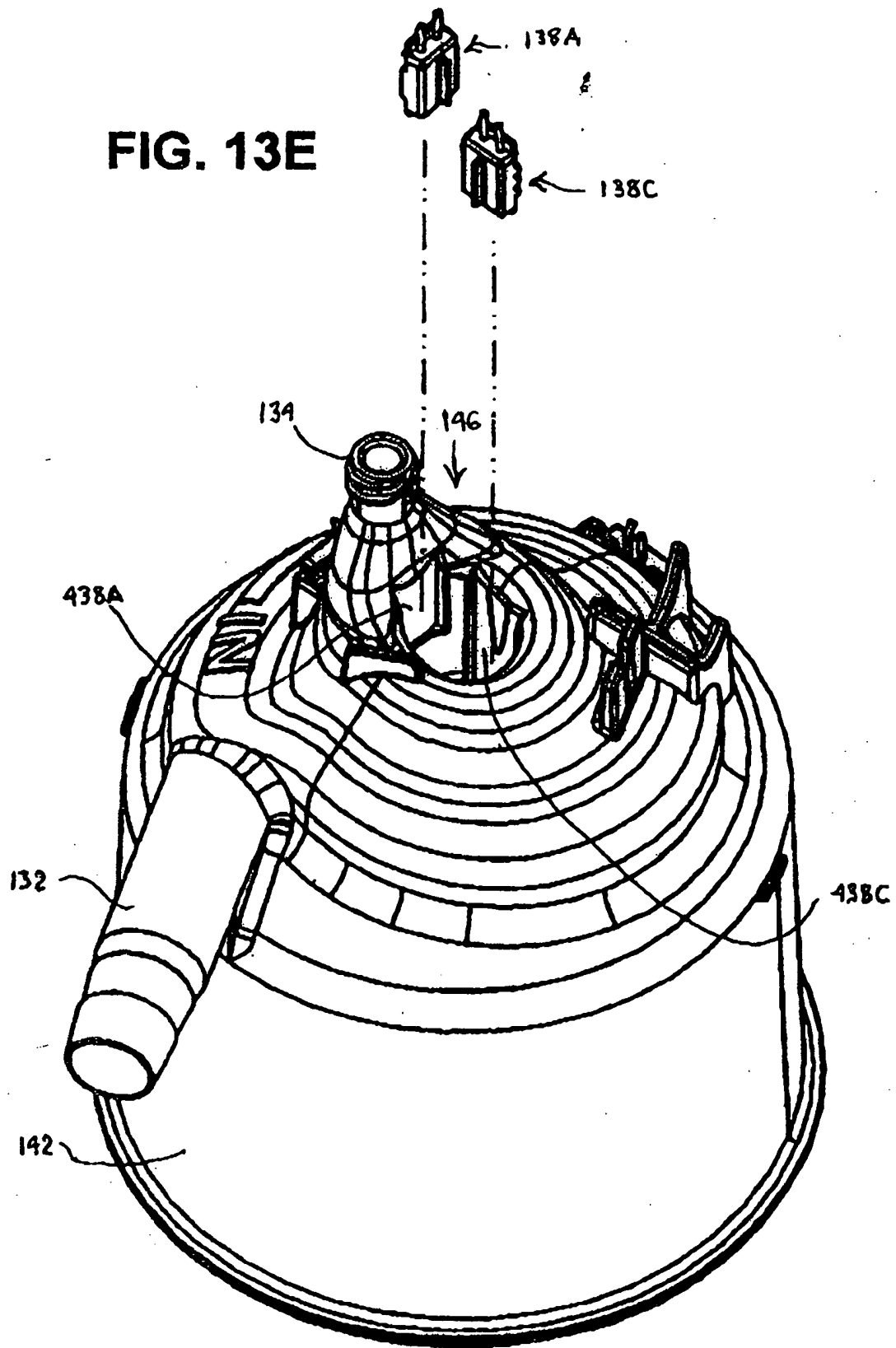
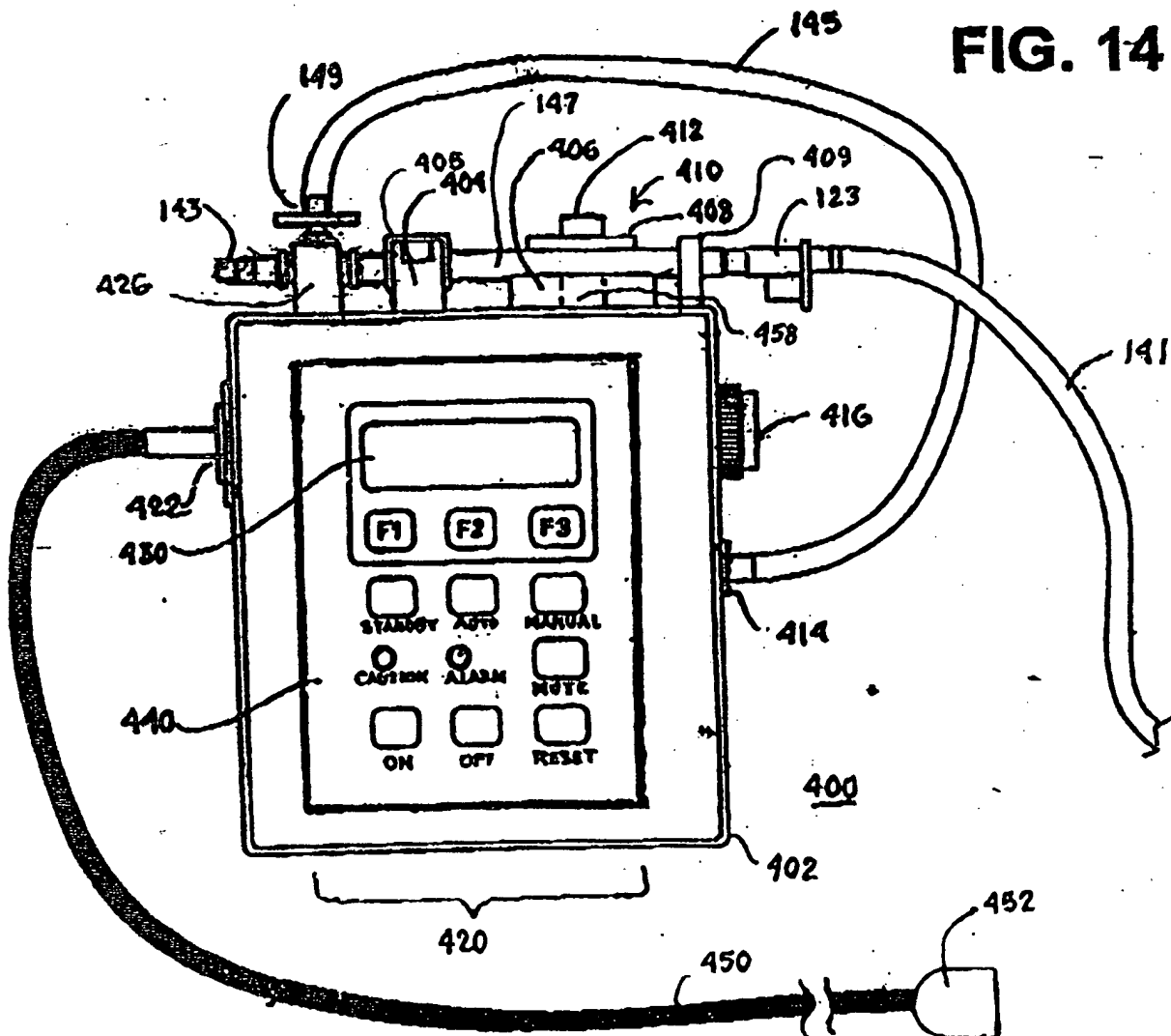


FIG. 14



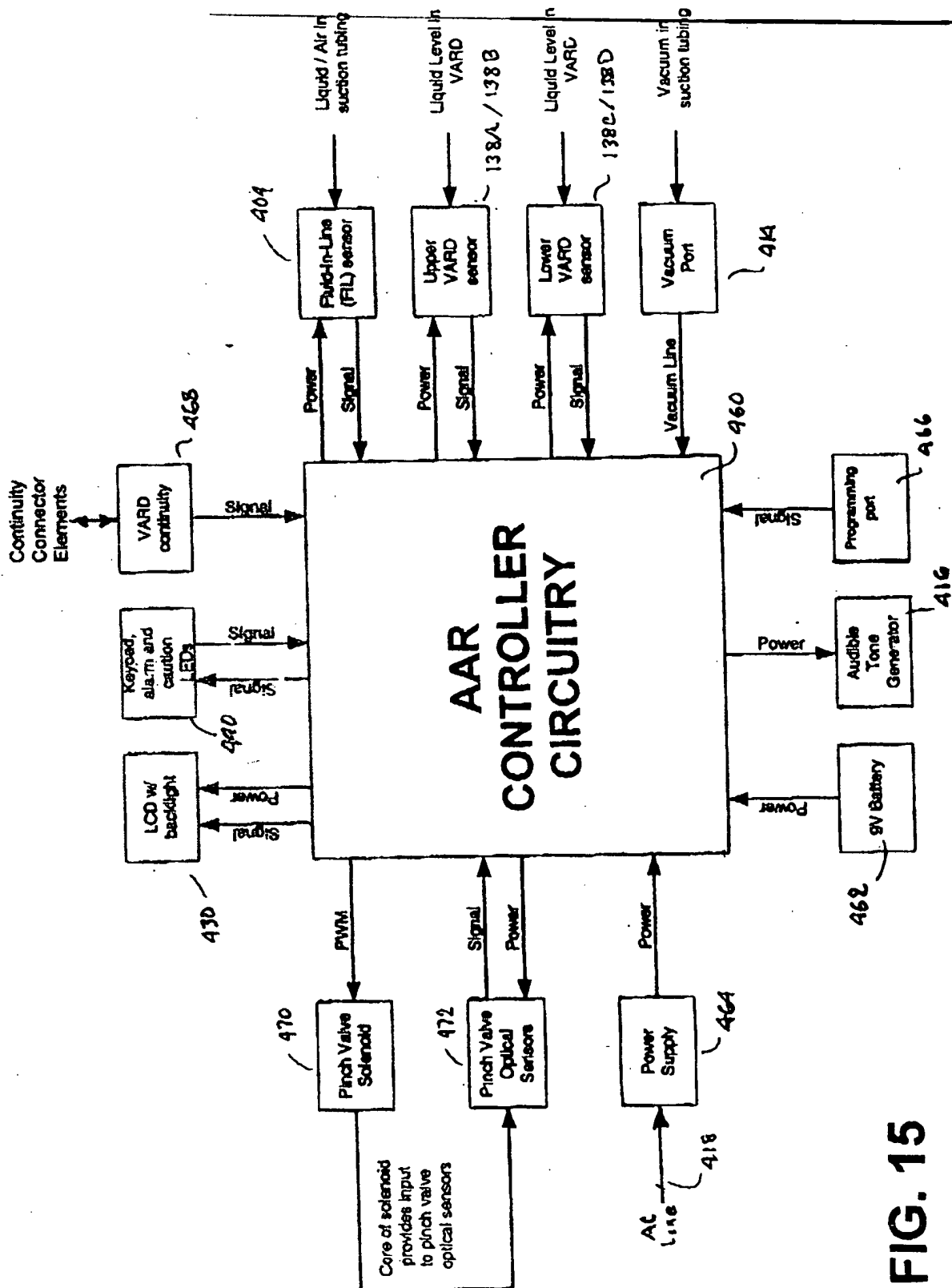


FIG. 15

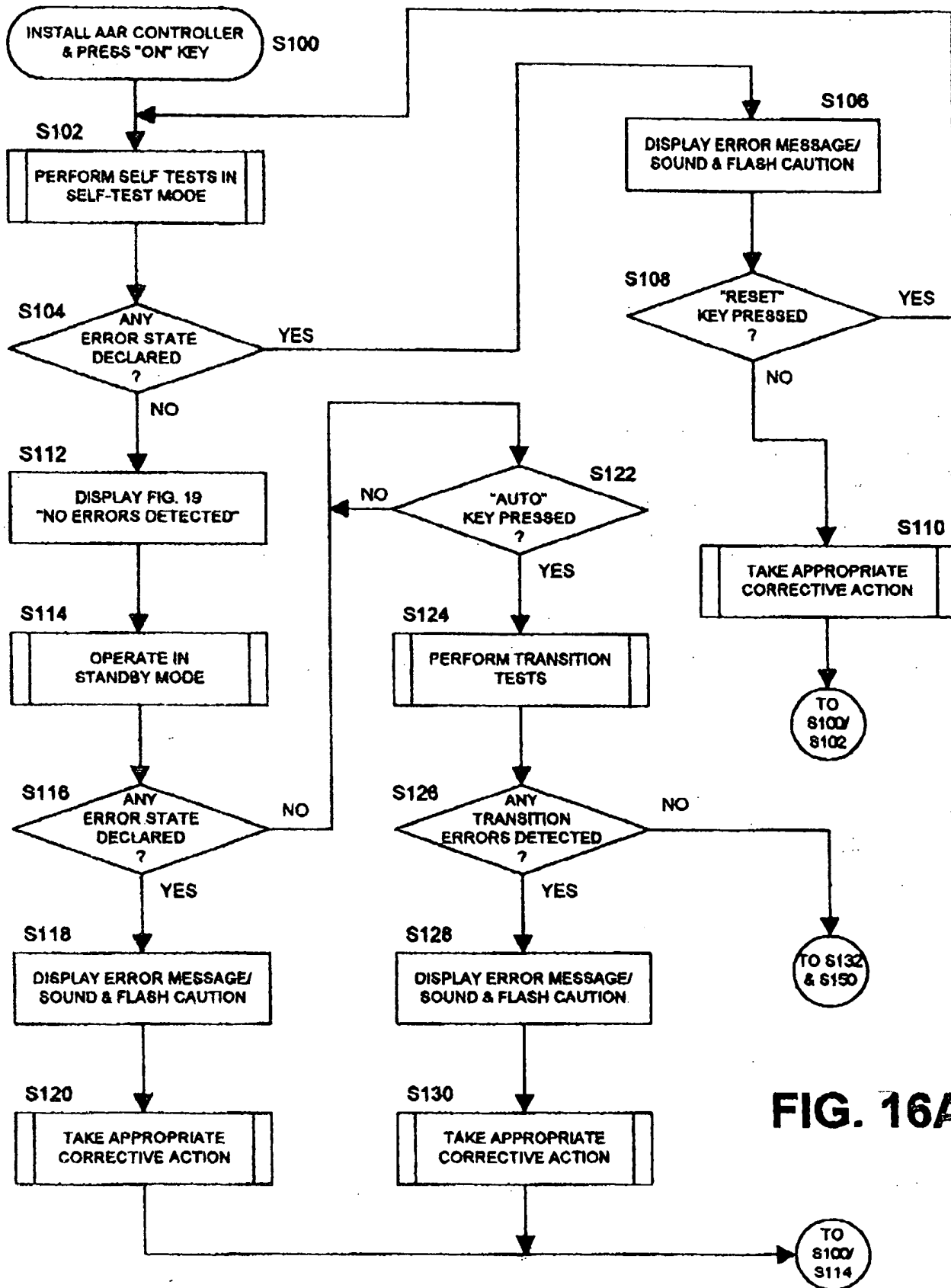


FIG. 16A

FIG. 16B

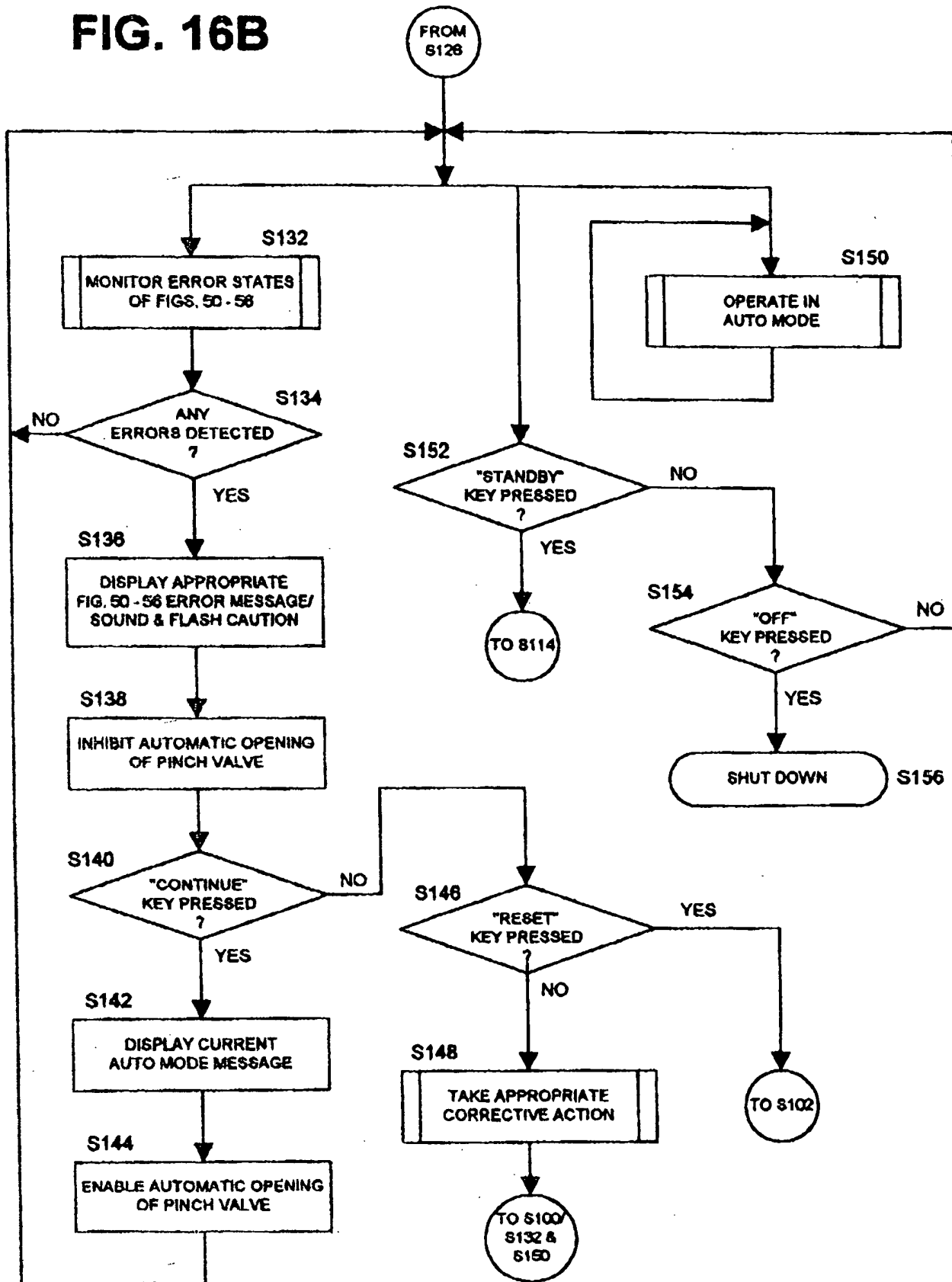


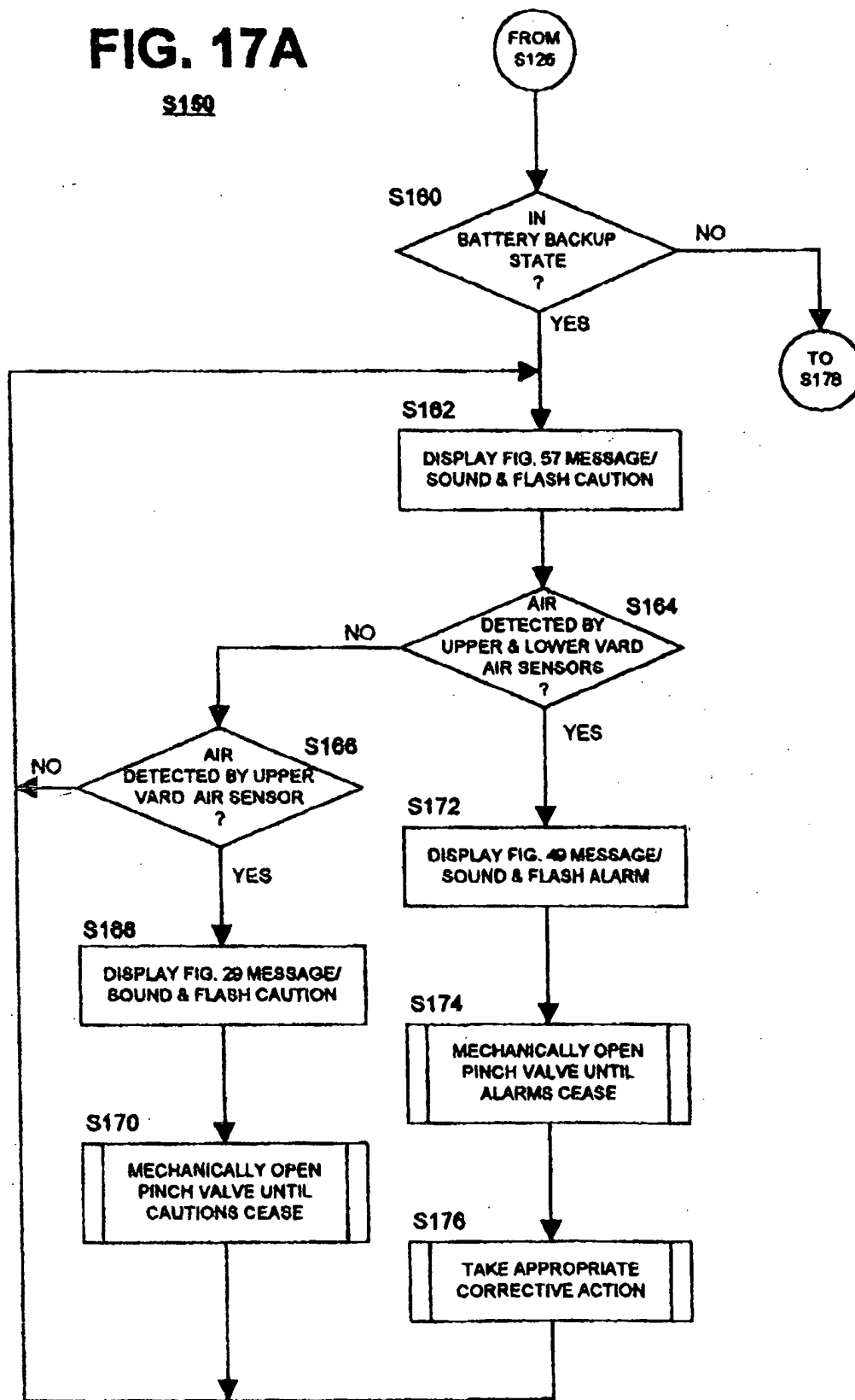
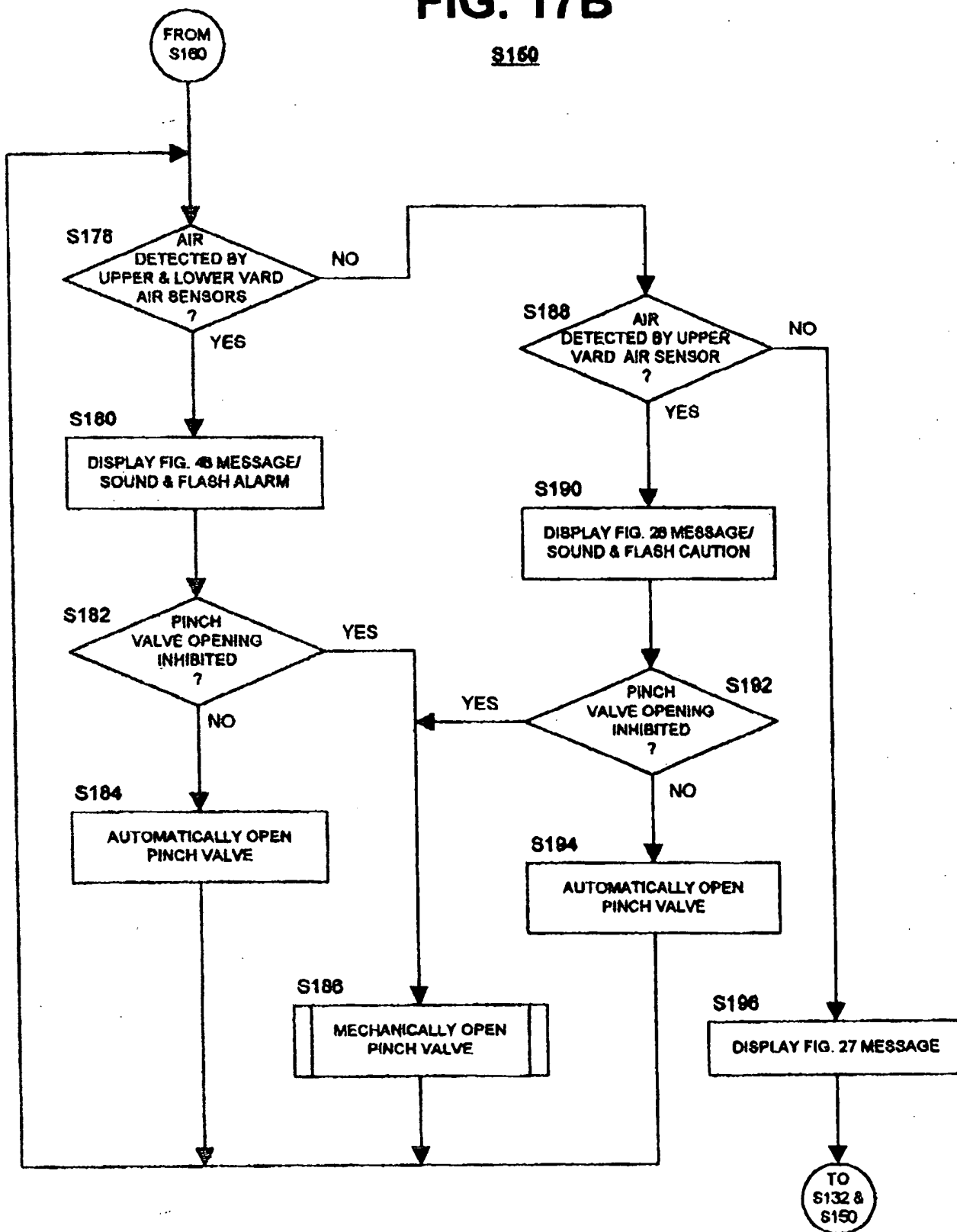
FIG. 17A**S160**

FIG. 17B

S160

FIRMWARE VERSION X.XX
PERFORMING SELF TEST

FIG. 18

SELECT LANGUAGE
ENGLISH
< > SELECT

FIG. 22

SELF TEST COMPLETE
NO ERRORS DETECTED

FIG. 19

FLUID SENSOR TEST
SENSOR STATUS
AIR
RETURN

FIG. 23

VALVE CLOSED
STANDBY MODE
SYSTEM READY
MENU

FIG. 20

FLUID SENSOR TEST
SENSOR STATUS
FLUID
RETURN

FIG. 24

LANG SENSOR RETURN

FIG. 21

VALVE OPEN
STANDBY MODE
SYSTEM READY
MENU

FIG. 25

VALVE OPEN
STANDBY MODE
BATTERY BACKUP ON
MENU

FIG. 26

SELF TEST COMPLETE
CRC FAILURE
REPLACE AAR CONTROLLER

FIG. 30

VALVE CLOSED
AUTOMATIC MODE

FIG. 27

SELF TEST COMPLETE
VALVE STUCK OPEN
REPLACE AAR CONTROLLER

FIG. 31

VALVE OPEN
AUTOMATIC MODE
AIR IN VARD

FIG. 28

SELF TEST COMPLETE
VALVE STUCK CLOSED
REPLACE AAR CONTROLLER

FIG. 32

MANUAL OPERATION
OPEN THE VALVE

FIG. 29

SELF TEST COMPLETE
AAR CONTROLLER FAILURE
REPLACE AAR CONTROLLER

FIG. 33

SELF TEST COMPLETE
LOW BATTERY
CONTINUE?

FIG. 34

VALVE CLOSED
STANDBY MODE
AIR IN VARD
MENU

FIG. 38

SELF TEST COMPLETE
NO BATTERY BACKUP
CONTINUE?

FIG. 35

VALVE CLOSED
STANDBY MODE
LOW SUCTION
MENU

FIG. 39

SELF TEST COMPLETE
BATTERY BACKUP ON
CONTINUE?

FIG. 36

VALVE CLOSED
STANDBY MODE
BATTERY BACKUP ON
MENU

FIG. 40

VALVE CLOSED
STANDBY MODE
VARD NOT CONNECTED
MENU

FIG. 37

VALVE CLOSED
STANDBY MODE
LOW BATTERY
MENU

FIG. 41

VALVE CLOSED
STANDBY MODE
NO BATTERY BACKUP
MENU

FIG. 42

AAR CONTROLLER FAILURE
REPLACE AAR CONTROLLER

FIG. 46

VARD NOT CONNECTED
CONTINUE?

FIG. 43

LOW SUCTION
CONTINUE?

FIG. 47

CHECK VALVE TUBING
CONTINUE?

FIG. 44

VALVE OPEN
TOO MUCH AIR
ENTERING VARD

FIG. 48

CHECK VARD SENSORS
CONTINUE?

FIG. 45

MANUAL OPERATION
OPEN THE VALVE

FIG. 49

AUTOMATIC MODE
VALVE STUCK OPEN
CONTINUE?

FIG. 50

AUTOMATIC MODE
VARD SENSOR FAILURE
CONTINUE?

FIG. 54

AUTOMATIC MODE
VALVE FAILURE
CONTINUE?

FIG. 51

VALVE CLOSED
AUTOMATIC MODE
LOW SUCTION

FIG. 55

AUTOMATIC MODE
VALVE STUCK CLOSED
CONTINUE?

FIG. 52

AUTOMATIC MODE
VARD NOT CONNECTED
CONTINUE?

FIG. 56

SYSTEM FAILURE
BLOOD BEING REMOVED
CONTINUE?

FIG. 53

AUTOMATIC MODE
BATTERY BACKUP ON

FIG. 57